Interface Configuration Commands

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Chapter 1 Interface Configuration Commands

1.1 Interface Configuration Commands

The interface configuration commands include:

- interface

- description

- bandwidth

- delay

- shutdown

- show interface

- show running-config interface

1.1.1 interface

Syntax

To enter the interface configuration mode, run this command. If the logical port is inexistent, you have to create this port first and then enter the port mode. If the physical port is inexistent, the command will fail to be executed. The negative form of this command has different functions for the physical port and the logical port.

[no] interface *port*

To return to the default settings of the physical port, run this command.

no interface *physical-port*

To return to the default setting, use the no form of this command.

To delete the logic interface, run this command.

no interface *logical-port*

Parameters

Parameters	Description
Port	Stands for the existent physical or logical port.

Default Value

The default mode is not the port mode.

Command Mode

Global configuration mode, interface configuration mode, ONU configuration mode, vlan interface configuration mode

Usage Guidelines

When you execute this command in configuration mode, you have to enable this command to be in port configuration mode first. When the port command is configured, you shall use the exit command to exit from the port mode.

Example

The following example shows how to enter the port mode of port g0/1.

Switch_config# interface gigaEthernet0/1
Switch_config_g0/1#exit

1.1.2   Description

Syntax

To set the description information of a port, run the following command.

description line

To return to the default setting, use the no form of this command.

[no] description

Parameters

Parameters	Description
line	Stands for the character string of the description information, among which space may exist. It can be configured with multiple ones.

Default Value

There is no description information by default.

Command Mode

Interface configuration mode, ONU configuration mode

Usage Guidelines

This command is configured in port configuration mode.

Example

The following example shows how to set the description information of port g01/1 to up link.

Switch_config# interface gigaEthernet0/1
Switch_config_g0/1# description uplink

1.1.3   bandwidth

Syntax

To set the bandwidth of an interface, run the following command.

[no] bandwidth *kilobps*

To return to the default setting, use the no form of this command.

no bandwidth [kilobps]

Parameters

Parameters	Description
kilobps	port bandwidth, the value ranges from 1 to 10000000(kbps).

Default Value

The default value of the 100M port is 100000; the default value of gigabit port is 1000000; and the default value of 10GE port is 10000000.

Command Mode

Interface configuration mode, ONU configuration mode

Usage Guidelines

This command is configured in port configuration mode.

Note:

The configured bandwidth does not mean the actual bandwidth of a port, but is used by some protocol to calculate the port cost.

Example

The following example shows how to set port g0/1 to 10000000.

Switch_config # interface gigaEthernet0/1
Switch_config_g0/1# bandwidth 10000000

1.1.4 delay

Syntax

To set the delay of an interface, run the following command.

delay *tensofmicroseconds*

To return to the default setting, use the no form of this command.

[no] delay *tensofmicroseconds*

Parameters

Parameters	Description
tensofmicroseconds	port delay, the value ranges from 1 to 10000000 (10 microseconds)

Default Value

The default value of the delay is 1.

Command Mode

Interface configuration mode, ONU configuration mode

Usage Guidelines

This command is configured in port configuration mode.

Example

The following example shows how to set the delay of an interface to 10.

Switch_config # interface gigaEthernet0/1
Switch_config_g0/1# delay 10

1.1.5   shutdown

Syntax

To enable the port, run this command.

[no] shutdown

Parameters

None

Default Value

The physical port is in enabled shutdown status by default.

Command Mode

Interface configuration mode

Usage Guidelines

This command can be used (in the PON port or the uplink port) to enable or disable port.

Example

The following example shows how to disable port g0/1.

Switch_config # interface gigaEthernet0/1
Switch_config_g0/1# shutdown
The following example shows how to enable g0/1:
Switch_config # interface gigaEthernet0/1
Switch_config_g0/1# no shutdown

1.1.6   show interface

Syntax

To browse the state of an interface, run the following command.

show interface [port]

Parameters

Parameters	Description
Port	Name of an interface If a specific port is not in the command, the system will show the statuses of all ports.

Default Value

None

Command Mode

Other modes except the user mode

Usage Guidelines

This command can be used in EXEC and configuration modes to show the physical status and packet reception statistics of a port.

Example

The following example shows the information about port gpon0/1:

Switch_config# show interface gpon0/1

GPON0/1 is up, line protocol is up

    Ifindex is 14, unique port number is 14

    Hardware is GPON, address is 00e0.0fbe.5969 (bia 00e0.0fbe.5969)

    MTU 1500 bytes, BW 1000000 kbit, DLY 2000 usec

    Encapsulation ARPA

    Flow-Control Off

    5 minutes input rate 0 bits/sec, 0 packets/sec

    5 minutes output rate 0 bits/sec, 14 packets/sec

        Received 426 packets, 50537 bytes

        0 broadcasts, 0 multicasts

        0 discard, 0 error, 0 PAUSE

        0 align, 0 FCS, 0 symbol

        0 carriersense

        Transmited 90580 packets, 22495 bytes

        90576 broadcasts, 0 multicasts

        0 discard, 0 error, 0 PAUSE

        0 sqettest, 0 deferred

        0 single, 0 multiple, 0 excessive, 0 late

1.1.7   show running-config interface

Syntax

To display the settings of a port, run the following command.

show running-config interface [port]

Parameters

Parameters	Description
Port	Stands for the existent port.

Default Value

None

Command Mode

Global configuration mode

Usage Guidelines

This command can be executed in EXEC or configuration mode to browse the settings of a port.

Example

The following example shows the settings of port gpon0/1:

Switch_config#show running-config interface gpon0/1
Building configuration...

Current configuration:
!
interface GPON0/1
  gpon bind-onu sn 5457475020150093 1
  gpon bind-onu sn 5457475020150020 password 123 2
  spanning-tree mstp restricted-role
  scheduler policy wrr
  mac access-group ma
  switchport protected 1
  switchport port-security mode dynamic

1.2   Configuration Example

The following example shows how to create a VLAN port, set its description information and IP address and browse the status and settings of this port.

To browse the port status and configuration, run show command.

Switch_config# interface vlan 1

Switch_config_v1# description uplink

Switch_config_v1# ip address 192.168.1.1 255.255.255.0

Switch_config_v1# exit

Switch_config# show running-config interface vlan 1

Building configuration...

Current configuration:

!

interface VLAN1

 description uplink

 ip address 192.168.1.1 255.255.255.0

Switch_config# show interface vlan 1

VLAN1 is up, line protocol is up

   Ifindex is 2146

   Hardware is EtherSVI, Address is 00e0.0fbe.595c(00e0.0fbe.595c)

   Interface address is 10.112.4.160/24

   MTU 1500 bytes, BW 1000000 kbit, DLY 2000 usec

   Encapsulation ARPA

   ARP type: ARPA, ARP timeout 04:00:00

   5 minutes input rate 0 bits/sec, 0 packets/sec

   5 minutes output rate 0 bits/sec, 0 packets/sec

      Received 426 packets, 50537 bytes

      0 broadcasts, 0 multicasts

      0 discard, 0 error, 0 PAUSE

      0 align, 0 FCS, 0 symbol, 0 fragment

0 jabber, 0 oversize, 0 undersize

Transmited 91770 packets, 22495 bytes

91766 broadcasts, 0 multicasts

0 discard, 0 error, 0 PAUSE

0 collision, 0 indisc, 0 deferred

0 single, 0 multiple, 0 excessive, 0 late